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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO.       |
|---|-------------|----------------------|------------------------------|------------------------|
| 10/772,098  | 02/03/2004  | David W. Cullens     | 00-4678/CIP                  | 4664                   |
| 39820   | 7590        | 08/03/2007           |                              |                        |
| EDWARD M. LIVINGSTON, PA<br>963 TRAIL TERRACE DRIVE<br>NAPLES, FL 34103 |             |                      | EXAMINER<br>PHILIPPE, GIMS S |                        |
|   |             |                      | ART UNIT<br>2621             | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>08/03/2007      | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |  |  |
|------------------------------|--------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/772,098 | <b>Applicant(s)</b><br>CULLENS, DAVID W. |  |
|                              | <b>Examiner</b><br>Gims S. Philippe  | <b>Art Unit</b><br>2621                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/03/04</u> . | 6) <input type="checkbox"/> Other: ____  |

### **DETAILED ACTION**

This is a first office action in response to application no. 10/772,098 filed on February 3<sup>rd</sup> 2003 in which claims 1-21 are presented for examination.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 11 recites the limitation "the digital camera" in line 2. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1, 3-15 and 17-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brocard et al. (US Patent no. 4,218,702) in view of Orlando (US Patent no. 3,982,255).

Regarding claims 1, 13 and 14, Brocard discloses an aerial video camera system comprising a camera having electronic control by a universal-control computer that is positioned predetermined in an aircraft (See Brocard Abstract, col. 1, lines 64-68, col. 2, lines 1-5); the camera being attached to a pan-tilt head that is suspended rigidly from a base plate in a camera pod (See Brocard col. 2, lines 47-54); the vibration from the aircraft being absorbed by a resilient mount intermediate the base plate and the camera pod that is attached to the aircraft (See Brocard col. 2, lines 55-66); a transparent radome that is articulated and extended downwardly from a bottom of the camera pod for housing swivel panning and tilting view for the camera (See Brocard col. 2, lines 44-50); and electronic-control communication having control lines intermediate the universal-control computer, the camera and the pan-tilt head (See Brocard col. 2, lines 33-39, lines 62-66).

It is noted that while Brocard provides means to reduce aircraft vibration (See Brocard col. 2, lines 55-66), it is silent about the giros as claimed.

However, Orlando discloses video camera system proposing the giros affixed to the base plate for universal damping of vibration from the aircraft as claimed (See Orlando col. 1, lines 67-68 and col. 2, lines 1-3).

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Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Brocard's aerial video camera system by incorporating Orlando's gyros. The motivation for such a modification is to prevent error in aircraft drift due to side winds, tilt and height variation as taught by Orlando (See Orlando col. 1, line 68-67 and col. 2, line 1).

As per claims 3-5 and 17-18, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, the attachment bracket that is articulated for attaching the camera to the aircraft, and swivel panning of the camera on the pan-tilt head horizontally rotational is disclosed in figs. 3-5 and col. 2, lines 43-66.

As per claims 6-7 and 15, the limitations of these claims are illustrated in figs. 3-5.

As per claims 8-10 and 19-20, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Brocard further provides a universal computer including a joystick control of horizontally panning and tilting of the camera (See Fig. 1, item 19A), and a toggle-switching of on and off with a toggle switch (See col. 3, lines 21-26), and control of camera speed (See col. 3, lines 21-50).

As per claims 11-12 and 21, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Brocard further provide a plurality of camera

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features with predetermined pushbuttons including focus and zoom (See fig. 2, push-buttons 32, 33, 34 and col. 3, lines 21-26).

6. Claims 2 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brocard et al. (US Patent no. 4,218,702) in view of Orlando (US Patent no. 3,982,255) as applied to claims 1 and 13 above, and further in view of Loewen et al. (US Patent no. 7184072).

Regarding claims 2 and 16, most of the limitations of these claims have been noted in the above rejection of claims 1 and 13.

It is noted that while the combination of Brocard and Orlando discloses a monitor of a universal computer (See Brocard monitor 8 of fig. 2 and col. 2, lines 40-42), it is silent about an aerial camera system which includes a digital camera as specified in the claims.

However, Loewen discloses an aerial camera system including a digital camera as claimed (See Loewen col. 2, lines 33-36).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying the camera system of Brocard and Orlando by incorporating Loewen's digital camera. The motivation for performing such a modification in the proposed combination is to capture high resolution images and to be able to retrieve stored digitized data if post processing is desired as taught by Loewen (See Loewen col. 4, lines 31-34).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lissaman et al. (US Patent no. 5035382) teaches rapid assembly aircraft for ground surveillance.


Previnaire (US Patent no. 5497960) teaches device for aircraft and aircraft provided with such a device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Gims S Philippe  
Primary Examiner  
Art Unit 2621

GSP

August 1, 2007